

## **ABSTRACT OF THE DISCLOSURE**

[0023] The present invention provides a fast turbo-code encoder. The advantage of the encoding device is the encoding data is output via less exclusive-or (XOR) gate operations. The structure of the fast turbo-code encoding directly applies the exclusive-  
5 or operation on the input data and the internal value of the register, the encoding output is obtained via less exclusive-or gate time. Thus, the device of the present invention saves half of the gate time comparing to the conventional structure.